From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: "F r6fqHo!ht" <75121.100@CompuServe.COM>
Subject: 51S-1 overhaul
Message-ID: <960721041628_75121.100_FHI41-1@CompuServe.COM>

Well, as much as I tried to put this off, I finally started in working on a 51S-1 to see why it operated so intermittently. After replacing 9 tubes, some I bought from a list member, and after I replaced 11 cracked (and burnt)carbon resistors, I got to hear some side band and some short wave stations. That is until the main power fuse blew. I replaced it with another 5 amp which was in there and it only worked for 3 minutes and blew again. Then I noticed that it should only be a 1.5 amp fuse.

To make a long job a short story, I disconnected as much as I could from the secondary to try and isolate as much of the circuits as possible. I thought that all the blown cracked B+ line resistors might be a clue as to a problem in the Hi voltage power supply lines. (Please God, don't let it be the transformer!) I finally started checking the primary and couldn't find the partial short from the transformers to ground. After finally disconnecting all the transformer leads and al the .01 caps, I finally realized that I had a shorted primary. 2 ohms too ground. The resistance through the windings were close to the 8 ohms they should be, about 5 or 6, which is probably why it worked at a much higher current. I finally noticed,by comparing it to another 51S1 that the power transformer was a little rounded on all sides as well as the top. There was no other indication of heat, or burnt, or tell tale signs of a problem with it. Bah Humbug.

Question 1: Why would the partial shorted primary have anything to do with the B+ power supply and the B+ resistors going south? Is there a possibility that the turns ratio decreased in the primary and thus giving me a greater stup-up and I had a higher voltage on the secondary? This is all I can think of that would cause all those resistors to burn up. At least, the diode bridges are OK and also, as I write, if hte voltages were all higher, maybe why so many tubes were shot.

Question 2: Anyone have another transformer? It is Collins part labeled T6 and has the Collins number on it of 662-0002-00. The brand name is Freed and is Freed part 37558, although there are probably many different companies that made a similar transformer.

Question 3: I also noticed that the small cover that goes over the lamp that covers the dial light is missing. along with missing cover, I also have a missing cover that is under the chassis that fits over the three inductors. There are 3 indutors, L102, L013 and L104 and associated trimmer caps.

Question 4: I also need a small pot that sits inside the chassis, between some cans that is labeled receiver gain. It is a small pot, approx 1\2" in diameter, has a 1\8" short shaft and measures 2.5k.
It is R25.

Does anyone have these parts that I can purchase?

Regards from Hawaii,
Raymond J. Cote

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: n5off@w5ddl.aara.org
Subject: 51S1 Parts, Bonne Chance
Message-ID: <421726@w5ddl.aara.org>

Ray,

51S1 parts may be hard to come by as everyone is trying to get the other guy's parts to build a workable/saleable rig.

Davilyn in LA had some 51S1's for $1100 a few years ago, and I know they were stuck with some that needed parts and they couldn't get the parts. Perhaps they still have some junkers around.

I once got a part from Fair Radio, but it was from a G-133 and those had a different p.s. I believe.

There is an O.M. by the name of Dennis Brothers who has some new parts. Try the callbook to get an address.

Last and least, Surplus Sales of Neb.

73 de tom

Still Wanting: BC-348 New Condition
Keeper of Collins receiver contract data for BA.
Reply to: n5off%w5ddl.aara.org@usl.edu
Phone 318-989-3430

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: "Robert Fowle (KC8DBC)" <hammarlund@voyager.net>
Subject: ADDRESS CHANGE..PLEASE NOTE IT
Message-ID: <199607210258.WAA02482@vixa.voyager.net>

Friends; (forgive me if you receive more than 1 note on this)
i am changing providers (again) as the current one is having to many problems.
and secondly, because, i will be able to have my own Web page

(will post when ready)....
        Please make the changes for the new address:

New address is: hammarlund@jacksonmi.com

this address is good as of now. the old address will be good for a short time, but don't use it....as i will not get any mail send to it.

```
===========================================================]-[->
Robert Fowle      KC8DBC
The HAMMARLUND Historian
Ph. voice or fax  517-789-6721
1215 Winifred
Jackson, Mich. 49202-1946
E-mail at: hammarlund@vixa.voyager.net
                 HAMMARLUND LITERATURE WANTED
WANTED: MANUALS FOR ANY MAKE RADIO EQUIPMENT
===========================================================]-[->
```

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: List Admin/Owner BoatAnchor Mail List <listown@jackatak.theporch.com>
Subject: ADMINISTRIVIA: formatting posts on BA
Message-ID: <9607210922.aa14942@jackatak.theporch.com>

Gang-

I've been pretty quiet, working behind the scenes for a while, letting the list seek ways of "behaving itself"... more on that later...

The purpose of this post is simple:

We need to get folks back to helping each other out, and what better way to start than to go to the basics:

PLEASE set your margins for about 72 characters per line...

PLEASE, if you MUST use a wordprocessor for writing email, USE ASCII text as the "Save As" option, so lines can be formatted for 72 character width, with carriage returns.

Yes, I know you have a whiz-bang 20 inch monitor and can run 300 characters of 6 point type across a line, but the vast majority of BA list readers are using the basic tools of fixed size type in 24x80 format and it would sure help me and everyone out if we could all be considerate of each other and remember that some folks do not have, do not want, and can not afford (presumably because they are too heavily invested in Fire Bottle Radios! ;^) the latest whiz-bangiest...

Have a heart and make your posts in 72 character lines (you WinDoze folks with the fancy doo-daads will have to hunt for a "monospaced" font to make this work, but it will do you some good and it will help the list out immensely.

Thanks,
and now back to Boat Anchors... the show! ;^)
--
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657/#1789 -- both all mobile! ;^)
- - - BoatAnchor Mailing List Archiver/Owner - - -
listown@jackatak.theporch.com ---- firebotl@jackatak.theporch.com

---

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: K1EL@aol.com
Subject: AM Modulation XMFR Info
Message-ID: <960721064239_366360954@emout16.mail.aol.com>

I have a very nice compact military surplus AM modulation transformer that I would like to use for a homebrew low power AM transmitter. It is intended for some sort of Heising modulation service but not sure of the correct way to wire it up. It consists of a single center tapped coil with taps labeled 1,2,3 and has the following label:

UTC D-4724
TF 1A 14 YY
1,2,3 10,4000 ohms CT
70 MA DC EACH SIDE BAL
2,3 2600 ohms 150 MA DC
150 - 20KC
MAX LEVEL 25 WATTS 1000 cycles

My guess is B+ to tap 2, with push pull audio plates to 1 and 3, and tap 3 also going the plate circuit of the RF final amp. Would this be correct ?

Thanks, Steve K1EL

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: SP600@aol.com
Subject: AN/URM-32
Message-ID: <960721073023_581382228@emout16.mail.aol.com>

Hello all,

I am still trying to locate a copy of a operators / service manual for a
an/urm 32 rf generator. Any leads who be very much appreciated.

Charlie N9SOR

//////////HAMMARLUND COLLECTOR\\\\\\\\\\

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: k7yha@juno.com (richard h. arland)
Subject: British Mk-128 Spy Radio for TRADE
Message-ID: <19960721.165206.4455.5.k7yha@juno.com>

I have a Mk-128 TX/RX with homebrew power supply. Condition is Good +.
It worked the last time I tried it which was about 5 years ago. I
recently
found it while cleaning out the shack. I have a photocopy of the manual.
Previous owner had installed a 10:1 reduction drive on the RX. This can
be removed to go back to a stock rig.

This rig was used by the British SAS in Borneo in the mid 50's thru the
early 60's. It covers 2-12 Mhz on the RX and the TX is xtal controlled
with
2-3 watts output. The power supply (also built by the previous owner)
needs going over. It supplies heater, B+ (high tension) and bias voltages

to a 4 pin plug on the front of the rig and has RAF Air Ministry meters
for
plate current/voltage.

THIS RIG IS NOT FOR SALE. I will trade it for a GRC-64 Green Beanie
transceiver in good to excellent condition with accessories.

73 rich K7YHA
(717) 825-5395 (home)
(717) 675-1101 ext: 263 (work)

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: "J. Lee Smith" <lsmith@mail.icenter.net>
Subject: cleaning aluminum
Message-ID: <31F2655D.2B42@mail.icenter.net>

Hi Folks:
I have a nice National NCX-5 and NCL-2000 combination which both are in
good shape except for the aluminum inserts on the knobs which are dull,

```
and have what appears to be a surface oxidation problem.  Before I screw
them up by doing something stupid like putting them on the grinding
wheel to buff them at 4 in the morning, anyone have any suggestions on
how to properly return them to like new gleam?
Thanks to all,  keep 'em glowing! 73
J. Lee Smith, VE4ANC.
<lsmith@icenter.net>



From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: wb6zwc@ns.net
Subject: Collins 51S1
Message-ID: <199607211727.KAA03414@tomcat.ns.net>

Gang; here is my input on the 51S1.

I purchased a first class manual from the Manual Man
                                          P.A. Markavage
                                          27 Walling ST.
                                          Sayreville, NJ
                                          08872-1818
                    908-238-8964

The manual covers the Collins 51S1/1A/1F/1AF/1B---when you are
done reading you will have a fair understanding of what all these
units are.

Sure wished I could make some money out of this..

Note: I believe Markavage is a list member.
====================================
Wanted 312-B3
Richard@Sacramento,Ca.



From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Tom.Daley@530.gigo.com (Tom Daley)
Subject: fs: hp 130c scope
Message-ID: <b49_9607211009@gigo.com>


hello ba people, for sale (1) hewlett-packard 130c
as seen in fair radio catalogs ! its in great condition
and works great. 500khz bandwidth and 0.2 mv/cm sens.
fair radio price $155 checked, my price $75 checked !!
comes with detachable rack handles and power cord.
```

sorry no manual. good monitor or audio scope - thanks 73 tom
-no cry babies please -
--
: Fidonet: Tom Daley 1:203/530 .. speaking for only myself.
: Internet: Tom.Daley@530.gigo.com

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Thomas Bryan <tbryan@mailstorm.dot.gov>
Subject: FS: LTV G-133 (51S1)
Message-ID: <199607211553.LAA15281@mailstorm.dot.gov>

Hello Everbody,

A friend has an LTV G-133 for sale. This is a Collins 51S1 modified for aircraft use. Asking price is $850.

Please do not shoot me or contact me about this. Here is how to contact him for more information:

Dennis Karski
sigint@execpc.com

He is located in the Milwaukee area.

Tom Bryan
tbryan@mailstorm.dot.gov
Opinions expressed are my own.

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Bob Bell <bbell@inforamp.net>
Subject: G.R VTVM MANUEL
Message-ID: <199607210201.WAA04468@mail.inforamp.net>

I would like to buy the complete manuel for the General Radio VTVM 1800-A;
or trade for the complete HC-10 manuel

Bob/VE3VJX   bbell@inforamp.net

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: k7yha@juno.com (richard h. arland)
Subject: Hallicrafters Stuff needed
Message-ID: <19960721.020358.4431.13.k7yha@juno.com>

WTB: HA-5 VFO that matches the early to mid 60's Hallicrafters transmitters. Unit needs to be in good to exc condx with no mods. State price and condx.

Manual needed: S-51 Receiver. VLF to 12 MHz. Will pay photocopy costs.

73 es tnx

rich K7YHA
(717) 825-5395 (home)
(717) 675-1101 ext:263 (work)

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Roland S Geter PhD <wb6lna@dancris.com>
Subject: HELP: -- Storing BA's --
Message-ID: <199607211729.KAA11351@dancris.com>

I recently purchased a 40ft Movable OCEAN CONTAINER (8' x8' x40') which is the actually large double axle Van Trailer without the wheels for those not familiar. The storage unit, which is virtually weather and burglar proof, is not insulated (yet) but I would like to use it to store BA units. These will include but not be limited to some parts units, some non-working units waiting their turn for restoration, and also restored perfectly working units.

I am sure there are recommended storage temperature and humidity levels. Since I live in the Arizona desert I am sure excessive humidity will not be a problem that would affect electrolytics or transformers. Please consider the following:

1) Within shat ranges should these levels maintained?

2) And what is a recommended way to control these levels year round using minimum energy requirements assuming little or no AC power. Solar replenished 12VDC is available in unlimited quantities.

Temperature outside the units get up to 110 degrees with under 5% humidity levels most of the year; perfect evaporative (swamp) cooler conditions. One month per year (August) we experience humidity above 60% (freon AC conditions).

Roland S. Geter PhD - WB6LNA/7 ex W2RPQ
Internet: wb6lna@dancris.com
       roland@dancris.com
    ax25: WB6LNA@kc7y.az.usa.noam

```
 _______________________________________________________
|                                |
|    Visit our Web page for brand newly manufactured    |
|       Collins Radio Accessories and tell others. |
|                                |
|        http://www.dancris.com/romad/collins.htm  |
|_______________________________________________________|
```

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Lrware@aol.com
Subject: Larry's almost free stuff lists, the requiem...
Message-ID: <960720195846_160617966@emout15.mail.aol.com>

Good evening Hollow State fans:
It's time for Larry's last almost free stuff list...
(I'm about out of stuff to give away, which is good
because I must have twenty piles sitting around here
to be packed and hauled to the post office.)
In a week or so I'll do ONE "clean up" post for anything
without a home yet.
Today, as my very late Spring Cleaning continues...
For you AM receiver aesthetics out there...
I offer the following for shipping costs:

Two more 455 Khz filters.
So we are going to have two "winners" here.

The first filter I posted was so popular that I went and dug
two more out of the junk radio piles in the garage...
(Don't worry, they are all old sand-state police rigs I bought
at auction a while ago... I would never strip good BA radios
for stuff like this... :-)

Those of you asked too late the first time will have to ask
again, because idiot that I can be, I didn't save the mail
after telling you, "sorry, it's gone."

These are RCA "Sealed Selectivity" filters,
P/N 3460514-7
C.F. 455 Khz, B/W 12 Khz,

micro coax input and output cables...
Untested, as-is, but the price is hard to beat!

In order to receive these items for only shipping costs,
you must do the following.

1) Tell me why you need/want them, points awarded for:
   a) Owning equipment that uses them, or could use them.
   b) Needing them for a home-brew project.
   c) Making up an outrageous story of what you will use them for.* :-)
      * For item "c" the taller and more unbelievable the better...
2) Bonus points to anyone who has sent me a manual, helped me find a part, or provided advice, (good or bad, it's the effort that counts. :-) or sold me a book at a reasonable price.
3) Triple bonus points to anyone who offers to trade any display dud transmitter tube for above...
4) Automatic grand prize winner status awarded to anyone who will take them both as partial trade for a RADIOTRON Designers 4th ed.

Winners will be determined any darn way I feel like.
Judges decision is final. (Although open to bribes :-)

-Larry Ware
lrware@aol.com
Orlando, FL

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: don merz <71333.144@CompuServe.COM>
Subject: NC-46, mics, misc FS
Message-ID: <960721174344_71333.144_DHB8-1@CompuServe.COM>

Radio Stuff and Literature For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
Offers, trades and comments are welcome at
71333.144@compuserve.com

Astatic JT-30 microphone, excellent with stand and cable: $49
Astatic 10-D microphone. This is the one with the all-chrome body. Like new in original box with stand adapter and instructions. $69
National NC-46 general coverage receiver. All original including knobs and paint. But the paint is just good-to-fair. The radio is two-tone gray. The darker smooth gray with the controls and markings on it is fine. The lighter gray has some surface discoloration in spots, one

rust spot on top and several small paint chips around various edges. A light overspray of a gray that was close would preserve the wrinkle underneath and make this radio sparkle. The dial is excellent and works correctly. The radio overall wroks but badly. The line cord has been replaced. Even as it is, this is a handsome receiver. $99
WWII Navy headphones CDC-49016. With canvas-covered headband in excellent condition. Look like ANB-H-1 headset. $15

Literature

Drake T-4X/T-4 original manual. Good. $13 PPD
Meissner "How To Build..." manual. 1943 version. Very good. Covers all Meissner receivers and transmitters, test gear and more. $19
ARRL Course in Radio Fundamentals. George Grammar, 1942. Binding edge is deteriorating. $11 PPD
CQ Surplus Scgematics Handbook, Grayson, 1960. 112 pages. Very good. $26
Surplus Radio Conversion Manual, Volume III, William Orr, 1960. Very Good. $26
Thordarson 344-C Transmitter Guide. 1939. Excellent original. $22

Not Radio-Related

I have a bunch of Lionel, Gilbert, American Flyer and othher such-like catalogs fdating from 1949-1964 available. Please send me an e-mail for the list.

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Neal McEwen <nmcewen@metronet.com>
Subject: Need National AGS coil set
Message-ID: <31F25D90.F5E@metronet.com>

BAers,
I'm in need of a coil set for a National AGS, National's first superhet in 1932. AGS and FB-7 coils look a lot alike, both 6 pin with an aluminum handel on the top. I think the AGS coils are marked A1, A2, A3, etc rather than Det A, OSC A of the FB7.

--
73 de K5RW, Neal McEwen nmcewen@metronet.com - Richardson, TX (Dallas)
Telegraph Key Collector and Historian Web Page
http://fohnix.metronet.com/~nmcewen/ref.html

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Partially Built Kit Find

Message-ID: <199607210156.UAA29232@dlep1.itg.ti.com>

Greetings,

At the Fort Worth sidewalk sale this morning I picked up a mostly unbuilt early Knight-kit. Most mechanical parts have been mounted, but only a few solder connections have been made. Most resistors and capacitors along with all the coils are unwired (and unmounted). It's called simply "The Knight RF Signal Generator", no model number evident and dates on the errats sheets indicate it was produced in 1955. Naturally, it came with the original box and such.

It's rather an interesting piece of equipment. The cabinet is wrinkle finish dark (Forest?) green, very similar to the dark Heathkit green. The knobs are identical to the fluted knobs used by Hammarlund and others of the era, although the knob color is a brownish-gray rather than black. The kit's complete and pristine, absolutely mint of course.

I put together a similar signal generator, the successor model in the early '60's and although there was nothing spectacular about it, I've been looking forward to assembling and using this one. I reasoned that since someone already started the kit-building process, I'm guilt-free. However, if anybody thinks this thing is worth preserving in its current state and wants it more than I do, I'll be happy to consider some sort of trade.

Regards,
Bill Sorsby, N5BU   bill.sorsby@dlep1.itg.ti.com

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: jml@spider.lloyd.com (Jim Lockwood)
Subject: SBE-34: Drift, TX/RX frequency, and FMing
Message-ID: <m0ui30S-001NcOC@spider.lloyd.com>

Gang,

This is a follow up to my earlier posting (mid May) on my adventures with a Sideband Engineers model 34 transceiver, circa 1963. In my earlier post, I related how I wanted an "adequate" fix for a designed-in AGC problem. Since doing this, I have been looking for "adequate" ways of dealing with three other notable problems: continual drift, convergence of the transmit frequency and receive frequency, and an annoying tendency for FMing on the transmit signal. If you or someone you love has an SBE-34, then this posting may be of interest.

For inspiration, I referred often to the excellent article on the SBE-34 in the December '95 issue of ER, and I recommend this article to anyone contemplating the challenge of owning one of these radios.

In the ER article, Walt, KJ4KV, went to a lot of trouble to re-engineer the VFO circuit. Such a job is way beyond my capabilities, so as I did with the AGC problem, I looked for a simpler solution that would be "adequate".

Heat management is one weak area of this rig and Walt significantly improved it by adding a small fan above the finals and by sealing its exhaust so hot air would definitely *leave* the radio. This change made sense to me so I implemented it exactly as he did. This made a big improvment in the drift problem but did not cure it "adequately".

Walt also mentioned installing a piece of modern sand in the form of an LM-317 three terminal, adjustible voltage regulator to supply power to the VFO and VFO buffer. He apparently did this after re-engineering the VFO and before he improved the cooling of the rig with the fan. This may have been a minor tactical mistake. Here's why:

After I put in the LM317 regulator and the cooling fan, the VFO drift in my SBE-34 has become not just "adequate" but extremely "adequate". The radio drifts slowly up in frequency for the first 30 minutes of operation from a cold start and is not noticeably drifty after that. This morning, for example, I was in a QSO with other left coast, hollow-state radio ops and I didn't touch the main tuning at all for over an hour. That's plenty good enough for me.

Here is why I think this LM-317 helps so much. The original regulator circuit is a zener diode and a transistor wired such that the transistor acts as a shunt regulator. The biasing of the transistor provides some feedback that tends (but only *tends*) to stabilize the output voltage against variations in load and input side fluctuations.

Switching between transmit and receive for example, I measured in excess of 100mV shift in VFO power supply voltage. (More on this later.) Further compounding the problem with this circuit is, I think, a missed opportunity by the original engineer to achieve some much needed temperature compensation. As I recall from somewhere in the dim distant past, the temperature drift of Zeners is of the opposite sense to that of transistors. And at 3.3V, the drift of a zener exactly cancels the drift of a silicon transistor, making that combination particularly good for a cheap and dirty regulator. While the SB-34 uses mostly germanium transistors, I can't help but think an appropriate zener voltage selection could have benefitted the drift problem this radio has.

However, the drift and load sensitivity characteristics of the original zener/transistor circuit are only academically interesting. The LM-317 is simply a rock. Its output doesn't move, period. And a result, the VFO in the SBE-34 has become much more stable over time to the point that it is as good as, say, the VFO in my HT-37 or my Marauder.

In addition to "adequately" fixing the thermal drift problem, converting to the LM-317 for the VFO supply regulator has had an unexpected additional benefit.

In using the radio before installing the LM-317, I noticed that it would not reliably return to the proper receive frequency when I unkeyed the transmitter. There is an adjustment to ensure the transmit frequency matches the receive frequency, but fiddling with this was of little help. The receiver was always somewhere different when I unkeyed the rig from where it was when I keyed it. By having substituted the LM-317 for the zener/transistor regulator, this problem has vanished.

In retrospect, I strongly suspect the Tx/Rx frequency adjustment pot was put in as a factory bandaid to compensate for the poor regulation characteristics of the zener/transistor combination. In any event, the fan and the LM-317 by themselves have cured two of the three problems I listed in the subject line of this posting.

The third problem I needed to solve was FMing. It was really, really bad. Without exception, everyone I talked to using the SBE-34 complained about it.

In the ER article, Walt tackles the FMing problem by reducing the coupling between the VFO and the buffer stage and by reducing the mike gain control. He reported that this "made the problem tolerable".

That didn't set well with me, so I looked for another solution.

My scope revealed to me that the VFO power supply line was picking up significant amounts of RF when I would transmit. How much is significant? I was seeing about 150mV P-P on a DC line set to 7 Volts. I reasoned that this was the crux of the real problem of FMing and I set out to eliminate it.

My approach was to look for ways to improve the bypassing on this DC line.

The factory bypassing, I realized as I studied the layout of the radio, probably was doing little if any good. The only high-frequency bypass cap I could find in the radio was a .01uF ceramic located a good 2 inches from the VFO and having at least one lead an inch long. My semi-educated guess was that this cap and lead combination was being used well above its self-resonant frequency, rendering it nearly useless.

So, I scrounged through my Junque Boxxe for various ceramic caps that looked potentially useful. Instinctively, I was looking for caps in the range of 200pF to about .005uF. Selecting half a dozen in this range, I then shorted their leads together such that the total wire length was about 3/4" total. (This length was about what I thought I could achieve in adding a more judiciously located cap to bypass the VFO DC line.) Next, I used my grid dip meter to look for a cap/wire combination that resonated just above 15M; I wanted the capacitor to act like a capacitor at all of the operating frequencies of the radio. By chosing one with a self resonant frequency above the 15M band, I could achieve this goal. The winner turned out to be a physically small .001uF ceramic disk. This resonated around 25Mc.

I tacked one end of this cap to the copper shield that covers a lot of the VFO circuitry on the solder side of the PC board. The other end of this cap is attached to one post of the pot formerly used to adjust the VFO supply voltage. (The pot is now just serving as an inert terminal post for my new regulator circuit.) With the .001uF cap installed in this manner, there is about 3/16" wire lead associated to the cap and maybe another 3/4" of wire to get the DC to the VFO.

Without doing more major surgery than I wanted to have to do, this is as short a lead length as I could easily achieve. Would it be good enough? The initial results are very gratifying.

On the air yesterday afternoon with Denny, WB7EGG, I got a thumb's up on the signal quality from the SB-34. He could detect no sign of FMing and my scope showed that the RF on the VFO supply line was completely gone! This morning, on the air with the SB-34 in a roundtable for over an hour, no FMing was reported at all. I am cautiously optimistic at this point.

The changes I've made to this radio to make it "adequate" take about as long to describe as they take to implement. So far, I've put in an "adequate" fix to the designed-in AGC problem, a more than "adequate" fix to the heat problem, a more than "adequate" fix to the Tx/Rx frequency and drift problem, and an apparently "adequate" fix to the FMing problem.

The radio is now usable and can serve as the luggable station I had hoped it would be when I bought it. I'll be verifying this later on in the week when I QSY again to 4-land for a while, taking the SBE-34 with me.

Today's on the air reports did include the observation that the audio bandpass characteristics sound somewhat restricted....few highs and few lows. So, when I return with the SBE-34 in a few weeks, that is what I'll tackle next.

Stay tuned.

73,

Jim - km6nk

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: "Benjamin D. Hall" <bdhall@ghgcorp.com>
Subject: To good home: Tek 541 manual
Message-ID: <31F163F5.3D61@ghgcorp.com>

Hi Folks, got a Tek 541 manual that is surplus to my needs that came with my Tek 543 scope. It is an original (for serial number 7284, if you want to know), in okay to good shape except some of the tabs are crumbling. If you have a Tek 541 and need it, let me know and it is yours for the cost of shipping.

If more than one person replies, it goes to the recipient of my choosing! Be sure to tell me why you need it. Criteria: Bonus points for owning a non-working 541, bonus points for helping me out in the past, bonus points for being a regular contributor to the list, bonus points for selling me a radio in the past, and other criteria that I haven't established. I'll get back to all respondants in about a week or so, to give the digest folks a crack at it.

73,
Ben

```
--
===================================================
+         Benjamin D. Hall, Houston Texas         +
+  BDHall@GHGCorp.com   BHall@GP802.JSC.NASA.gov  +
===================================================
```

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: "D. Ragsdale" <doragsda@oboe.aix.calpoly.edu>
Subject: Tube substitution question
Message-ID: <9607210311.AA90789@oboe.aix.calpoly.edu>

Good evening, ye of warm hearts and warm shacks:

Do you think I could substitute a pair of 6L6's for a pair of 1614's in an audio amp push - pull configuration? I don't have data for a 6L6, just for a 6L6-GB - and in the configuration I'm looking at it looks like they're running the 1614's up at their upper limits, so I'm doubtful the 6L6 could fill in. Maybe in a low power set-up, but any additional and more informed wisdom would be appreciated.

No, I'm not becoming a tube audio fan, someone just gave me this old Fisher amp with no tubes in it, and I'm trying to avoid buying the 1614's (expensive!) to see if I can get it to work. I figure with an old tube Heath FM tuner I have, it'll make a nice garage radio.

Thanks in advance.

Dave
KF6BOM
David Ragsdale
doragsda@oboe.calpoly.edu -or-
du651@oasis.calpoly.edu

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: spr@earthlink.net (Scott Robinson)
Subject: Re: Tube substitution question
Message-ID: <v01530503ae1727f80da3@[153.37.85.78]>

Dave,

The 1614 is only marginally more muscular than the 6L6, 6L6GA, or -GB. The 6L6GC is rated for considerably more plate dissipation and voltage than any of the preceding. However, the GE tube manual suggests a higher plate load for the 1614s in PP than for a similar 6L6 configuration. You might try hanging an 8 ohm speakr on the 16 ohm tap to compensate; the plate load ratio is 6600/3800, which is getting on for 2:1. Loudspeaker impedances vary all over the lot anyway, so see which sounds better!

I'm sure it'll work either way. Gotta have tunes in your garage...but DO check the coupling caps or you'll just smoke a pair of perfectly nice 6L6s.

Regards,

Scott Robinson
spr@earthlink.net

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: d.buska@aaiate.com
Subject: Want: Swan Meter
Message-ID: <96Jul20.235756cdt.15362@gateway.aaiate.com>

I am working on getting an old Swan 250 6M transceiver going. Thanks to the many fine people here on the BA list I have manuals and schematics for the 250 and the later 250C. One thing that bothered me about he 250 is it doesn't have an S-Meter. The S-meter was added to the 250C though. After reviewing the schematics, it looks like it would be an easy conversion to add the S-meter to my 250.

Now, here is what I need.....
Does anyone have an old Swan meter working or non-working? It appears that all Swan meters are the same (1mA). Thus, I could just pull the meter scale off of a non-working meter and place it on my 250's meter. I guess I didn't mention it, but the 250 does meter the transmitter currents. In fact the meters that were used in the HF Swans (350, 500 and 700) will most likely be ok as well.

Current 250 meter scales:
OUTPUT labeled 1 to 10 (I could live without this scale)
PA Cathode Current 0 to 400mA

Again, the meter is a 0-1mA unit.

73
Don N9OO
Kenosha, WI
d.buska@aaiate.com

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Nick England <nick@cs.unc.edu>
Subject: wanted - Drake TR-4 cover
Message-ID: <199607202217.SAA24260@altair.cs.unc.edu>

Picked up a Drake TR-4C without the bottom cover at the Cary NC hamfest.
If you've got a junker (dirty/rusted/bent is OK) please let me know.

Also need a copy of the manual - will send the usual $$ or trade one I have (most all Heath/Knight/Johnson/Eico - some Halli/Hammar/Nat/Collins).

Good deals at the hamfest -

This TR-4C	$40
75A-2	$50
Globe Scout	$5
HQ-170C in the original box $100 (I couldn't resist)	

and a pretty fair selection of Heath SB series stuff.

Saw several boatanchorites and BoatANchor Bob NA4G said to tell everyone "Hello" and he's working on getting net access agian.

73 & HAVE FUN!
Nick KD4CPL

Nick England nick@cs.unc.edu   KD4CPL
http://www.cs.unc.edu/~nick

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: "J. Lee Smith" <lsmith@mail.icenter.net>
Subject: WTB-NC-46 Cabinet parts
Message-ID: <31F28DB8.42DA@mail.icenter.net>

Hello Again folks!
I have an NC-46 which has been in my family since new, I have re-tubed and re-capped it, and have it working like a charm! Over time the following cabinet pieces have gone missing through about 20 QTH changes since it was new:

Bottom cover,
Chrome trim on the bottom left and right-hand sides including the wire holders for the trim,
National emblem on speaker.

Can any of you fabulous folks help me bring this back to original condition? Thanks to all of you great people! Regards from Canada
J. Lee Smith,
VE4ANC,
110 Senecal Drive,
St. Francois Xavier,
Manitoba,
Canada
R4L 1A9
(204) 864-2334
e-mail direct to <lsmith@icenter.net>

From boatanchors@theporch.com Sun Jul 21 14:25:00 1996
From: Karan Lee Carruth <klccarru@tenet.edu>
Subject: WTB: CX-75/TRC-2
Message-ID: <Pine.OSF.3.91.960721111840.30869A-100000@abernathy.tenet.edu>

I need a CX-65/TRC-2. This is a 50' power cord with a male connector on one end and a female connector on the other end that connects a BC-1306 or GRC-9 to a PE-162. Any help will be appreciated.

Thanks,

Lenox Carruth, WA5OVG
klccarru@tenet.edu